

PATENT
Docket No.: 53924US010

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re Application of: DESMOND T. CURRAN AND ELFED L. WILLIAMS | |
| Serial No.: | 09/871,223 |
| Filed: | May 31, 2001 |
| For: | MANNER OF ATTACHING COMPONENT ELEMENTS TO FILTRATION MATERIAL SUCH AS MAY BE UTILIZED IN RESPIRATORY MASKS |
| | Group Art Unit: 3761 |
| | Examiner: Aaron J. Lewis |

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| Certificate of Facsimile Transmission | |
| Pursuant to 37 CFR 1.8, I certify that this correspondence is being sent to the telephone number shown below, addressed to Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below indicated date. | |
| To Facsimile Number 703-872-9302 | Signature <i>Lynelle K. Grube</i> |
| Date November 17, 2003 October 17 , 2003 | Printed Name Lynelle K. Grube |

DECLARATION UNDER 37 CFR §1.132 OF LOWELL E. CHRISTENSEN

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I, Lowell E. Christensen, hereby declare that:

1. I received a BSc degree in Education from South Dakota State University in Brookings, S.D. in 1972 and from 1974 through 1978 completed coursework inside 3M equivalent to an Electrical Engineering degree.
2. I have read the pending claims of the above-identified U.S. Patent Application.
3. From 1972 through the present I have been employed by 3M Company in its Medical Products Division, Occupational Health and Environmental Safety Division, European headquarters and Filtration Products Project as follows:

Serial No. 09/871,223

Docket No.: 53924US010

| Time Period | Location | Last Position |
|-------------------------------|-------------------|---|
| December, 1972 to April, 1983 | Brookings, SD | Plant Engineering Manager, 3M Medical Products Division Brookings plant |
| May, 1983 to March, 1987 | Hinsdale, IL | Plant Manager, 3M Medical Products Division Hinsdale plant |
| April, 1987 to April, 1992 | Aberdeen, SD | Plant Manager, 3M Occupational Health and Environmental Safety Division Aberdeen plant |
| May, 1992 to June, 1996 | Brussels, Belgium | Manufacturing and Logistics Manager, 3M European Personal and Environmental Protection European Business Center |
| July, 1996 to June, 1998 | St. Paul, MN | Manufacturing Operations Manager, 3M Occupational Health and Environmental Safety Division |
| July, 1998 to present | St. Paul, MN | Manufacturing Manager, 3M Filtration Products Project |

4. From July, 1996 to June, 1998 I was the global team leader for a group of 3M personnel responsible for the scale-up and launch of a 3M UK-designed flat-folding respirator known internally as the "Genesis" mask. The Genesis mask is similar to the mask shown in Fig. 21 of U.S. Patent No. 6,123,077.

5. The Genesis mask required new manufacturing equipment and techniques. During my tenure as global team leader our team reviewed a number of proposals

Serial No. 09/871,223Docket No.: 53924US010

concerning such equipment and techniques. In connection with those reviews I met at the Saint Paul, Minnesota headquarters of 3M Company ("3M US") with Mr. Desmond T. Curran, a visiting 3M UK employee. Mr. Curran showed me prototype tooling and exhalation valves that had been fastened to filtration material using the prototype tooling and a variety of techniques. Mr. Curran also showed me several assembled samples, including samples in which fastening took place by cold-forming a deformable extension member against the filtration material; thermal forming a deformable extension member against the filtration material; forming a deformable exhalation valve extension member against a flat filter material web; forming a deformable exhalation valve extension member against a previously molded cup-shaped filter material respirator blank; and by applying a hot-melt adhesive to the extension member followed by cold forming. The cold formed samples included both swatches of filtration material and completed flat panel and molded cup-shaped masks fastened to exhalation valves using the tooling. The thermal formed samples and hot-melt adhesive samples included at least swatches of filtration material and may have included completed masks. Mr. Curran demonstrated the steps in the process and operation of the tooling, and showed me that in all instances an effective seal had been formed.

6. When launched, the Genesis mask employed ultrasonic welding to fasten the exhalation valve to the mask body. However, several other exhalation valve fastening techniques were considered prior to launch, including those demonstrated by Mr. Curran in the course of his above-mentioned visit. Mr. Curran's visit and the associated discussions and demonstrations occurred during the time span from July, 1996 to June, 1998. I note in saying so that Mr. Curran's valve attachment invention was thoroughly considered by our team after Mr. Curran's visit and before the Genesis mask launch date, that Mr. Curran's visit and the Genesis launch date took place during my tenure as the Genesis global team leader, and that my tenure as team leader ended when I moved to the 3M Filtration Products Project in July, 1998.

7. All statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United

Serial No. 09/871,223

Docket No.: 53924US010

States Code and that such willful false statements may jeopardize the validity of the Application or any patent issuing thereon.

Further Declarant saith not.

10/24/03

Date

Lowell E Christensen

Lowell E. Christensen